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AUTHOR King, Kenneth
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ABSTRACT

Secondary education in Tanzania has a formal diversified curriculum in agricultural, commercial, technical, and domestic science that is reinforced outside of school hours by a set of powerful pressures on schools to engage in productive work. In many secondary schools there are two different, simultaneous traditions of diversification. The first stresses the importance of orientation to work and the educational value of industrial and agricultural work, whereas the second is explicitly concerned with production and the need for students to experience real work. A third level of diversification leads toward rural and self-employment of secondary school graduates. A World Bank research project that compared the effectiveness of diversified schools in Tanzania with those that have not undertaken diversification indicated that students from no-bias (academic) schools appear to do almost as well on the special vocational achievement tests as do those from schools that have diversified in one of the four prescribed subject areas. The study suggested that students in each of the four curriculum areas do not learn much in the way of how to transfer their learning to other disciplines, whereas the common sense approach of the academic schools enables the academic students to compensate for their lack of training in one of the areas in which diversification is underway. As Tanzania enters a new phase of diversification, more research is needed to enable a more accurate assessment of the program's successes and failures to date. (MN)

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EVALUATING THE CONTEXT OF DIVERSIFIED SECONDARY EDUCATION IN TANZANIA

Preliminary Comments

by

Kenneth King
University of Edinburgh

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Kenneth King

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Presented at the Conference on
Vocationalizing General Education
Institute of Education, University of London
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These comments will centre on Tanzania and its history and experience of diversification. There will be points at which the discussion may also be relevant to the diversified schools of Kenya and Colombia, but there will be no attempt to look at the same issues across all three countries. The mix of donor initiatives, national priorities, and patterns of parental and student involvement have been sufficiently complex within each country that it is difficult to sort out the various phases and interpretations of diversification nationally, quite apart from seeking to analyse inter-country comparisons. The latter task is certainly important, given the very large number of projects in this sphere that have been supported by the World Bank alone, but the form in which these aid projects became imbedded in particular countries over a period of 15 to 20 years is a prior task for analysis.

The intention is to hang some of these comments on to the analysis carried out by Psacharopoulos and Loxley, with the collaboration in Tanzania of I. Omari. Their book, Diversified secondary education and development, is a very useful account of the evaluation of this experience both in Tanzania and Colombia. By putting their results so openly into the public domain (unlike much agency-supported evaluation which remains quite inaccessible), they have made a very valuable contribution to the diversification debate. These present remarks explore somewhat further the context of Tanzanian diversification, and take some of the data made available by the study to help illustrate these contextual factors.

One of the most fundamental problems in assessing what at first sight looks like another version of IDA-diversification is that there are a series of other diversifications which are intended to impact

on Tanzanian secondary school students during this period. The first of these, reaching back to the Arusha Declaration and Education for Self-Reliance, but reinforced by the Musoma Declaration of 1974, underlined the diversification away from the purely academic, not just for pedagogical reasons, nor to help cover the recurrent costs of education, but to encourage socialist attitudes to work:

> A socialist is a worker. Therefore by introducing work in schools we are building socialist habits among the students. A student who refuses to sweep his room, for example, or wash his plate after a meal, puts himself in a class of people who live on the work of others, which is incompatible with socialism. 1

So quite apart from the formal diversified curriculum with its four special subjects, there is, out of school hours, a set of powerful pressures on schools to engage in productive work. This tendency towards actual production in schools, for a variety of socialist, economic and pedagogical reasons, was further reinforced in 1976 (a year or two before this 1981 sample joined form 1) by the establishment in the Ministry of Education of a special cell on productive education, and a series of grants to schools for mini-enterprises.[2] This meant that there were in many secondary schools two different traditions of diversification running side by side; one of these had usually underlined the importance of <u>orientation</u> to work, and the <u>educational</u> value of industrial and agricultural work; the other was quite explicitly concerned with production and the need for students to experience real work:

> As a nation, we have no excuse whatsoever for failing to give a chance to the thousands of able-bodied young men and women to participate fully in the production process, particularly those who are in secondary schools and other institutions of higher learning. We have not given them

> an opportunity to combine theory with practice, and in so doing we have made our students believe that they have a right not to work. 3

Virtually no work has been done on the interplay of these two different traditions of diversification. But quite apart from the agenda of socialist formation, and of reducing the Ministry'S contribution to recurrent expenditure, it must have been plain to many students in the most productive schools as the 1970s wore on, and the economic crisis deepened, that the school maize fields, chicken batteries, coffee plantations and even vineyards were at least protecting the nutritional standards of the boarding schools from being further eroded. Since the Ministry never put into operation its original intention of reducing its grants to schools as they became more profitable, this particular diversification-towards-production actually gave headteachers budgetary flexibility. In theory, this school-based production would be in addition to whatever work in agriculture, technology, commerce or domestic science was being pursued in the formal diversified curriculum. In practice, headteachers, especially those in schools with large farms, would need to make some very careful judgements about trade-offs between food production and results in the national Form IV examinations. For most schools in Tanzania we currently know next to nothing about the negotiations at the school level on educational production, nor very much at all about the technologies of production or the use of hired labour as opposed to student labour. But the indications are that there must have been a very considerable range of experience in agriculture alone between the immensely productive Cuban-aided agricultural schools, the schools in rich cash-crop areas, the schools in arid regions, by contrast, where twice as

much work might bring in half the result, and the schools where agriculture is only a cosmetic bias. In the various school-level compromises between IDA-diversification and what might be termed ESR-diversification* there are likely to have been some major differences in exposure to practical agriculture skill acquisition, as well as to the knowledge base for the 'science and practice of agriculture' syllabus.

We shall return in a moment to look at whether the World Bank's research project casts any light on this very complex set of agricultural initiatives in schools, but first it is important to point to a further crucial diversification that was set in motion throughout the secondary school system just a couple of years before this 1981 sample of Form IV students managed to enter Form I. This might be termed the diversification of the traditional selection and assessment procedures to include work experience, work attitudes, community orientation etc:

> The National Executive Committee therefore direct that the excessive emphasis now placed on written examinations must be reduced, and that the student's progress in the classroom plus his performance of other functions and the work which he will do as part of his education must all be continually assessed and the combined result is what should constitute his success or failure. 4

These measures included an attempt to delink university entrance from a reliance on cognitive achievement alone, as well as the introduction of non-academic aspects of school performance. A detailed discussion of these matters exists elsewhere,[5] but for our present purpose it is worth stressing that this second diversification (away from the exclusively academic) should potentially have reinforced the thrust of the first two traditions of diversification.

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* Education for self-reliance.

The attempt to reduce the diploma disease, or perhaps, more accurately, to broaden the scope of the disease to include non-conventional selection through work, should have helped schools to 'sell' the bias subjects to their student bodies. Again, it is in fact very difficult to know at the school level how much leverage these non-academic assessment measures actually exerted on student attitudes to work, and particularly on the practical sides of the diversified syllabuses, and on ESR-diversification. The organisational complexities of assessment through work experience (both in school and after school) are obviously enormous, and in many cases the students probably concluded that they should continue to concentrate on the written examination. They were often correct to do so, as this note on the practical side of the agricultural bias examination makes clear:

> Notes on practical work.
> Only questions pertaining to Laboratory and Workshop work shall be asked. Otherwise for the purpose of examinations, field practicals and or project work will be continuously assessed or locally examined, so that cumulative marks gained are finally averaged by the appropriate Examinations Council Authorities. 6

However, given the intention of government to emphasise the value of work commitment and manual skill in any overall assessment procedure, it will be worth seeing if the World Bank data set can shed any light, directly or indirectly, on this.

There is, still, a third level of diversification which needs to be noted before looking at the data, and that concerns the diversification towards rural and self-employment of the secondary school graduate, who had long been accustomed to think of him/her-self as a unit of high level manpower headed for the formal urban sector, and virtually guaranteed a wage job.

In one of the very first Ministry papers relating to diversification, back in 1971, this emphasis was already present, even though there were only just over 5,000 boys and 1000 girls in the government supported Form IV classes at that time. It is instructive to reproduce this comment since in one form or another it remains a constant over the next 10 or 15 years:

> It is hoped that when this programme is complete, the future secondary school leaver will be a handy as well as a brainy product who will be able to find himself a useful occupation as a self-employed person or as a productive member of any of our 'ujamaa' institutions. He should be productive while in school and also immediately he leaves school. It is a departure from the former practice where school leavers have to go in for preparatory training before they are expected to be productive members of the society. The aim is not only to give them such skills as would help secondary school leavers find useful occupations on completing their formal education but also to make them productive even while in school. They are expected to learn as they produce and produce as they learn. This is what 'Education for Self Reliance' advocates. Schools may not be and need not be the proper centres for intensive technical training. But they ought to be the initiators of human resource development. They must be able to offer the initial training required in a modern economy, a basic vocational training beneficial to those who proceed no further after Form 4, but at the same time giving a useful background for those who join industry or craft and technical institutions and training. A secondary school leaver going to his village or joining an 'ujamaa' village should be of immediate use to the latter too. And, so on. In other words, 'the education provided by Tanzania for the students of Tanzania must serve the purposes of Tanzania'. There is a great need - yet unassessed - for people with a practical orientation in ujamaa villages. Our education system is bent on fulfilling that need. 7

This notion of secondary education for self-employment would become more marked in the mid to late 1970s as

planners began to explore the concept of village manpower development, and by implication began to underline the contradiction between a secondary school system whose size was defined by formal sector requirements and a village development strategy whose needs for more educated and committed people were enormous.[8] Despite this clear rationale, the size of government-supported Form I in 1980 was virtually identical to Form I in 1977, at 8,800, just 2000 more than it had been in 1970. Thus, within the government sector at any rate, the diversification of the old manpower philosphy of the secondary schools took place against a background of stability, or even rigidity in the size of the government school places. If government secondary school students were somewhat less protected in their search for urban jobs in the late 1970s, it was less because of a rural diversification policy with its implications for dramatic school expansion, than because of a quiet mushrooming of private secondary schools competing for the same urban employment.

These several patterns of diversification (IDA; ESR; in assessment; and to rural employment) have all played upon either the policy makers, the teachers or the students, or all three, over the period of the 1970s. They may perhaps be reconceptualised in the following way. One pattern of diversification takes for granted that the secondary school student will take a leadership role in the public or parastatal sectors of the economy, and in this case the apparatus of diversification is expected to make him or her socially responsible to the majority who have not received the privileges and the duties of post-primary education in a poor country. To this end, there is the participation in productive labour, the assessment of commitment to the school and the

larger community, and finally, after school, the exposure to work experience and national service. Although we have characterised these measures as diversifications of conventional academic schooling, they are all part of the attempt to socialise the intellectual elite to the responsibilities of leadership. In other words, a diversification away from purely individual goals towards a series of national and community obligations. The other pattern of diversification fits those who do not continue with further formal education or training after Form IV, but who enter the labour market, either as employees or on their own account. They share with the first group the experience of productive labour, and the assessment of their non-academic achievements. But they do not receive the socialisation through national service or work experience. As they are not proceeding with further academic work, it is possible that the exposure to a particular bias in a more technical field may prove useful either directly or indirectly.

It will of course always be possible to argue that for a poor country to seek to offer some form of prevocational exposure across the ability range in a highly selective school system is a luxury it can ill afford. By definition many of the recipients of the IDA-diversification will never use it in a narrow sense. It will however be much harder to judge whether they have profited from what we have called ESR-diversification, intended to build some sense of solidarity with productive labour. And it might be even harder to estimate, for those destined for university, the extent to which attitudes laid down in the secondary school are reinforced by the years of pre-university work experience and national service.[9] These kinds of issues are ripe for discussion

at this very moment, for as Tanzania gears up for what has to be a very low cost version of secondary expansion, it may well seem that these earlier measures for the socialisation of the fortunate few of the 1970s were remarkably generous and even a little indulgent.

Insights from the World Bank data set on Tanzanian diversification.

The World Bank research project in Tanzania is principally concerned to pinpoint the possible advantages that might accrue to diversified school students (in the IDA sense) over against students from schools that have not undertaken diversification. Students were originally selected from all four biases (agricultural, commercial, technical and domestic science), though the last was dropped as there were too few schools involved and it had not been thoroughly implemented. The control group was provided by a set of schools that had not adopted a bias at the time of the research. The sample was drawn from both public and private schools in the proportion of approximately 3 public to 1 private. However, the actual proportions between public and private school samples in the different biases differ quite significantly from the overall ratio. Allowing for some small deviation in the rounding up from the percentages, the division between public and private students in the sample is as follows:

curriculum bias	public	private	total	No of schools
Academic	710	309	1019	13
Agricultural	1158	221	1379	18
Commercial	748	539	1287	19
Technical	405	87	492	7

(drawn from tables 6 - 2 and 6 - 51) in Psacharopoulos and Loxley op. cit.) 10

Since a good deal of the argumentation in the Tanzania case study relates to comparisons of cognitive achievement, it would be important to know as much as possible about the composition of these four crucial curriculum categories. Some examples may make this clearer. The category of 'academic' is strictly speaking not a bias at all, but in a school system where there had been strong pressure since the very beginning of the 1970s to allocate one of the four biases (including domestic science) to all secondary schools, those which still did not have this at the time of sampling in 1981 would in some sense have to be regarded as a residual category. It would have been difficult for one of the well known rural schools to have resisted taking on a bias for almost ten years. The tendency therefore might be for the academic category to be composed perhaps largely of urban schools, who could justify not having agriculture because of their situation and not having technical because of expense. Alternatively, they could also be day schools, or relatively recent foundations. Since traditionally in Tanzania the distinction between day and boarding has been very important, and has coincided, until recently, with an urban/rural division, it could well be that the academic category in the research is composed largely of urban day schools. One of the surprising results of the research project is of course that the no-bias (academic) group of schools appear to do almost as well on the special vocational achievement tests as do the schools with the biases (table 6 - 9). The latter test was composed of some 80 items (20 for each of the biases, including domestic science), and thus the academic group could be expected to be at some considerable disadvantage, since there was no cluster of items for which they had a headstart. Nevertheless, they would appear to

have done as well as the commercial and technical bias schools on the agricultural test items, better that the agricultural and technical bias schools on the commercial test items, and better or as well as the agricultural and commercial streams on the technical test items. Overall it could be said of these special vocational tests that each separate set of bias schools did slightly better than other biases (or the academic schools) on the test items aimed at their special bias, but there was little difference when it came to answering items on the other bias fields. Which suggests there is little transferability of principles learnt in the different biases to other curriculum areas, and that the commonsense of the academic schools managed to do as well as the bias schools in areas that were outside the latters' speciality.

In point of fact it is impossible to tell from the normalised mean used in the published tables what the actual performance was like on the original tests. From earlier papers, however, it can be seen that in general performance was very mediocre in all the vocational achievement tests. Thus, in commerce the mean scores (out of 20) were in general around 5 points; in agriculture around 6, and in technical around 7.[11] It is important to put these perhaps surprisingly low scores into the wider context of competence in English in Tanzanian secondary schools all of which have maintained English as the medium. Diversified bias teaching - and all the test items - are in English, but evidence from a very recent study suggests that achievement is extremely low;

> While the number of non-readers and those able to read only very simple picture books has halved by mid way through Form IV the

> number getting within reach of being able to read easy unsimplified texts is less than 10%. It is extremely worrying to find that nearly 1/3 of all pupils are still at the picture book reading level after four years of official English medium education. These results are a clear indication that throughout their secondary school career little or no other subject information is getting across to about 50% of the pupils in our sample. Only about 10% of Form IVs are at a level at which one might expect English medium education to begin. 12 (Emphasis added)

Without looking more carefully at the original test questions, it would be difficult to make a judgement, but it would seem not impossible, in the light of the language situation above, that the vocational test items were to some extent testing English comprehension as well as specialised knowledge. And that therefore the academic schools, with their extra 16 to 20 periods to distribute on the basic subjects, were able to keep up by virtue of their English comprehension. To take these kinds of issues further, it would be important to know more about the academic group of schools.

Similarly, with the technical bias schools. These would appear to do much better on their own subject area than do the other biases, which suggests that their bias gives them more of an advantage in their own field than do the others. Again, to get behind these interesting results, it is important to unpackage the technical bias schools. It is soon clear that the technical bias is somehow more special in Tanzania than is commercial or agricultural. Only a handful of government schools have been allowed to take on the technical bias, and all of these are included in the World Bank sample of 7. Of the government technical schools, several were much older foundations with a very strong craft/trade

school emphasis before their conversion, and the remainder were more recent. It is also plain that the external agencies have played an important role in cautioning against diversifying more technical schools than there would be external support to maintain. To a greater extent therefore than with commerce or with agriculture, there do not appear to be minimally diversified technical schools in the government sector. The donor anxiety that technical schools either be properly equipped or not started at all may be part of the explanation for the relatively better achievement in technical bias. However, there are additional reasons which can be deduced partly from the World Bank data set and partly from knowledge of the technical school context.

First, the Bank's data in general makes plain that government schools perform better than private, in general, and that boys outperform girls. In the sample, the technical schools are dominated by the government schools, and within these by boys over girls. There is, however, a further factor which is an extension of these. In Tanzania, there are in fact quite a large group of private (community) technical schools, organised by the successor organisation to the Tanganyika African Parents Association (TAPA).[13] These twenty private technical schools are in general equipped very meagerly, and their academic reputation nationally is far from established. Had a number of these foundations been added to the technical bias sample, it is certain that the apparent advantage of this specialisation would have been eliminated rather rapidly. Equally the cost of the technical specialisation would have been slashed, since Wazazi (TAPA) schools are run with an absolute minimum of equipment.

The reason for raising this issue is not principally to question the sampling, but rather to explore whether the data are able to offer us an insight into diversification-in-practice. There is no doubt that there are some interesting questions to be raised in the bias schools about the relationships between achievement in the academic subjects and the amount of time dedicated officially to diversification. But because of the links between what we have called IDA-diversification and ESR-diversification (with the latter's emphasis on productive labour, food production, and income generation), it becomes important to gain some measure of the practical skill acquisition associated with the bias, and not only some of its academic content. In much of the existing literature on Tanzanian diversification, including the Bank's case study, it is very difficult to get a sense of these practical dimensions of diversification, and particularly in what way the obligations to pursue productive labour intertwine or don't with the school's practical bias.

For instance, do the government technical bias schools seek to reinforce the lessons of diversification through productive activities in building, subcontracting, metal trades etc? Or do they have to 'diversify' from the technical work into agricultural labour in order to secure additional food and income? In what ways do the commercial bias schools (which would appear to be largely situated in towns, and be day schools rather than boarding) carry out practical income-generating activities? Do they run typing pools, for example, or run mini-companies that sell food on the roadside? We have already alluded to the extraordinary range of agricultural practice, from the half-day 'Cuban' schools, to the relatively high technology

Nordic aided community school, to the cash crop schools with their vines and coffee. Even though the government schools have in general far from reached the goal of covering 25% of their recurrent costs (excluding teacher salaries), can it be suggested that diversification contributes to the quite remarkable productivity of certain agriculture bias schools? Finally, it must be remembered that in one sense all schools must have a bias towards self-reliant activities and income generation. So that even the 'academic' schools in the Bank sample will be obliged to pursue some ESR-diversification, and this might well be in agriculture, depending on their location.

There is clearly no easy way to handle the acquisition of practical skills through the bias programme. It would be possible to look at the numbers of students from technical schools who successfully sat for the Grade Three Trade Test, though that national certificate might be thought more appropriate to the vocational schools than to the technical schools. It would have been possible to look at the national examination results at the end of Form IV, to see what indication there might be from the practical parts of the practical subjects. Or again, it might have been feasible to look at the reaction of local employers to such technical leavers. This latter would have been particularly worth doing in two or three urban centres such as Tanga (and now also Moshi) since there exist in these not only a biased secondary school but also a very well equipped vocational training centre. In this local context, it would perhaps have been possible to locate the difference between the vocational impulse with the emphasis on education, and the vocational impulse with the emphasis on training.[14] Finally, some indication of technical capacity might have been gained

from the scale and complexity of the income generating activities undertaken by the school. None of these would have been conclusive, and some could have been frustrated by the larger economic crisis, affecting imported materials, spare parts, and even local supplies of wood, cement and bricks etc. In a number of workshops, doubtless, under-capacity and under-utilisation of practical skills could be attributed to such factors. The present data set, however, can give no feel for whether the machine tools are standing idle in Ifunda, Moshi or Tanga, or whether groups of students with their instructors are running profitable automobile repair out of the back door of the school, or taking lucrative contracts for domestic furniture. Such operations are in one way much easier to organise in developing countries, but their 'success' is sometimes very much to the disadvantage of the small independent contractors in the neighbourhood.

Remembering, however, the two populations that are going through the diversified schools (those who are being socialised through work for their later leadership roles, and those who may directly enter the labour market), it is also very complicated to make a judgement about attitude change, political commitment to the school and the larger community. The Bank study acknowledges, at the very end of the Tanzania case, that diversification 'may still be considered worthwhile if the political objectives for which it was adopted are being realized'.[15] Perhaps quite properly, there was no attempt by this externally funded study to make a comment on this dimension of diversification.. In passing, however, it may be noted that the sampled students appear to regard auto-mechanics as more important

to Tanzania than party workers or youth leaders. On the more positive side, they also seem to regard primary school teachers as much more important than either secondary or university teachers! (table 6 - 22)

If both the practical and political dimensions of diversification are difficult to assess from the research project, the local dynamic and current tensions within the whole bias movement are also hard to assess from this data set. In effect the Bank study was undertaken at a very crucial time in the history of Tanzanian education. A Presidential Commission had just the year befor begun to review some of the most sensitive issues in Tanzanian educational policy, and would report by 1982. The dimensions of the private secondary school explosion were beginning to become clear, and particularly the impossibility of imposing a strict system of biases upon their curricula. Equally, in a large number of both government and private schools, including schools with special biases, there had grown up a practice of allowing separate fee paying academic streams to develop. Organised under the offices of the resident tutors of adult education, these particular streams of adults turned out to be the same age as the other students in the schools. They followed the same curriculum in the afternoons/evenings as did the regular students. The only difference was that they did not need to follow the diversified subjects. What had emerged quite silently was indeed a series of 'academic control groups' within some of the diversified schools.* Finally, as the bulge of the UPE entrants of 1977 moved through the primary schools, the pressure for secondary school expansion broke through, and

* See further K. King,'The end of education for self-reliance', Occasional Paper No. 1, Centre of African Studies, Edinburgh, Jan. 1984.

a whole series of new initiatives by districts, communities, educational foundations and the local churches began to take shape. As many of these were predicated upon community financing, and often made use of available buildings rather than custom-built facilities of the sort that were erected for diversification, it would seem highly probable that government will be unlikely to impose the precondition of a bias.

Nyerere has said as recently as 1984 that 'whenever and wherever we do create secondary schools, they must be Secondary-Technical schools, with many of them being biased to agriculture and other science subjects'.[16] However, the speed with which self-help movements in secondary education have proceeded, makes it rather unlikely that there will be even initially much beyond a cosmetic diversification. In an interesting change of direction on the older manpower policy of the secondary schools, Nyerere has justified this techno-scientific emphasis as follows:

> A person with an agriculture or science based secondary school education can be trained to be an administrator if necessary. We have a number of departmental heads in different ministries who are trained professionals of one kind or another, but an administrator cannot do the job of an Agricultural Officer or an Engineer. I could not, for example, do the job of an Engineer, but an engineer can decide to become a teacher or a politician. 17

What will be the results of these expansionary pressures upon the traditional emphasis upon diversification? One possiblity is that as the competition for Form V and university entrance intensifies, the schools that are currently allocating a third or more of their curriculum time to the biases will be forced dramatically to

reduce this proportion, so as to remain competitive with schools spending no time on these areas. This scenario will underline one of the continuing paradoxes of diversified education: that the best diversified facilities are often located in the parts of the secondary school system which are least interested in exploiting them. The schools with the weakest financial base will find themselves pursuing the narrowest of academic curricula, and preparing their students for national O-level type exams which many will fail. At the upper end of the range of well-endowed schools, there will increasingly be pressure to under-utilise the technical and agricultural facilities, - and to reduce the bias from 16 periods to an elective 3 or 4.

Kenya and Tanzania are thus faced with rather different situations in the mid 1980s. The politics of diversification in Kenya are currently pointing to some form of generalisation (or dilution) of the SIDA industrial arts model to much of the secondary school system. Tanzania, by contrast, had a rather dispersed investment of diversified education across the majority of the state sector and the best of the private sector. Despite Nyerere's advocacy, there may be little internal or external pressure to insure that every day-secondary or community school has the finance for diversification. But even without this, Tanzania will face the problem of how to protect and continue to utilise the investment in very large numbers of diversified workshops, school farms and office equipment across the nation.

It is common in situations of very rapid educational

change for the preoccupation with the new initiatives to proceed with very little understanding and awareness of the value of the old. It must be one of the regrets of the first phase of diversification in Tanzania during the 1970s that almost no research was conducted at the school level to illuminate the achievements and failures of diversification. What were the mechanisms that allowed some of the highest scoring schools in Tanzania to combine this with very remarkable agricultural productivity? Is there an enduring legacy of the realisation by teachers and students that productive labour can bring in millions of shillings into the school's recurrent budget? It is not too late for some research to look at some of these questions, and the possibility of doing so has greatly been assisted by the ground that has been broken by the World Bank study. A number of items in such a research agenda have recently been laid out in the University of Dar es Salaam's Papers in Education and Development, No. 10: 'Special Issue on Educational Research in Tanzania'.[18]

In concluding, it might be useful to add to that research agenda just one of a whole series of research tasks suggested by the World Bank's Tanzania case study. This consists of the fascinating evidence that of the rather small number of Form IV graduates who had actually joined the labour market within a year of leaving school, no less than 121 of those who were traced admitted to being self-employed.[19] What was surprising about this small group was that they claimed to be getting just exactly twice the amount of money that their employed colleagues in the public and private sector were getting. Since a significant number of these were working on their

own farms or on family farms and in petty commerce, it might just be relevant to look in a little more detail at the relations if any between their school experience and the rigours and rewards of self-employment.

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3. Musoma Declaration, op. cit., p. 3.

4. Ibid p. 4.

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8. Court and King, op. cit.

9. There have recently been significant changes in the amount of time laid down between secondary school graduation and university entrance.

10. G. Psacharopoulos and W. Loxley, Diversified secondary education and development: evidence from Colombia and Tanzania, (John Hopkins, 1985), pp. 145 and 206.

11. I.M. Omari, 'Diversification of secondary school curriculum and learning outcomes: some preliminary results', paper at Arusha workshop of Decentralisation of Research and Evaluation Capacities in Tanzania, Dec. 13 - 17, 1982, (mimeo), p. 14.

12. C. Criper and W.A. Dodd, Report on the teaching of the English language and its use as a medium in education in Tanzania, July - August 1984, p. 34.

13. United Republic of Tanzania: Vocational Training and Technical Education in Tanzania, (joint SIDA, GTZ, DANIDA mission to Tanzania), 1978, p. 62.

14. K. King, 'The planning of technical and vocational education and training' IIEP Occasional Paper, 1985, passim.

15. Psacharopoulos and Loxley, op. cit., p. 209.

16. J. Nyerere, Speech to the Education Seminar, Arusha, Oct. 1984, p. 9.

17. Ibid.

18. K. King and D. Komba,'Analytical comments on presented research reports and discussion trends' in Papers in Education and Development, No. 10, special issue on educational research in Tanzania (Department of Education, University of Dar es Salaam), Feb. 1985, pp. 8 - 24.

19. Psacharopoulos and Loxley, op. cit., p. 191 and 207.